

AR13

PATINO, N.V.
1977
ANNUAL REPORT



Patiño, N.V.

Directors and Officers

Antenor Patiño R., *Chairman of the Board, Director*
Jaime Ortiz-Patiño, *Deputy Chairman of the Board, Director*
Patrick J. Keenan, C.A., *President and Chief Executive, Director*
Daniel Azéma, *Director*
Marco P. Bloemsma, *Director*
William G. Brissenden, *Director*
Pierre M. Haas, *Director*
Frederic Y. McCutcheon, *Director*
Stephen P. Ogryzlo, *Director*
George Ortiz P., *Director*

Ronald E. Ford, *Vice President, Mining*
William A. Thompson, C.A., *Secretary-Treasurer*
John Mason, A.C.M.A., *Group Financial Accountant*

Head Office

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Bankers

Bank Mees & Hope N.V.
Bank of Montreal
Toronto-Dominion Bank

Stock Exchanges

Toronto and Montreal

Transfer Agents and Registrars

Patiño, N.V., The Hague
National Trust Company, Ltd., Toronto and Montreal

Auditors

Price Waterhouse & Co.

Annual General Meeting of Shareholders

24th May 1978
10:30 a.m. The Hague time
Promenade Hotel
van Stolkweg 1
The Hague, The Netherlands

Notice, Proxy and Information Circular
will be mailed under separate cover

financial highlights

(dollar figures in this report are expressed in United States currency unless otherwise stated)

For the year ended 31st December		1977	1976
		(thousands)	
Income before extraordinary items	\$ 5,863	\$	5,499
* per share	\$ 1.42	\$	1.32
Extraordinary items	\$ (86)	\$	12,663
* per share	\$ (0.02)	\$	3.04
Net income	\$ 5,777	\$	18,162
* per share	\$ 1.40	\$	4.36
Cash flow from operations	\$ 18,847	\$	15,577
* per share	\$ 4.57	\$	3.74
Expenditures on fixed assets, mine development and mining properties	\$ 5,806	\$	6,659
At the Year End			
Working capital	\$ 96,872	\$	82,677
Shareholders' equity at book value	\$108,996	\$	103,552
** per share	\$ 26.51	\$	25.05

* Based on 4,120,493 shares (1976 — 4,167,486 shares) being the weighted average number of shares outstanding (excluding shares held by a wholly-owned subsidiary company) during the year.

** Based on 4,111,382 shares (1976 — 4,134,445 shares) being the number of shares outstanding (excluding shares held by a wholly-owned subsidiary company) at the end of the year.

COVER:

This photograph is a specimen showing well developed cassiterite (SnO₂) crystals.

directors' report to the shareholders

Financial

Income before extraordinary items was \$5.863 million or \$1.42 per share and net income was \$5.777 million or \$1.40 per share compared with \$5.499 million or \$1.32 per share and \$18.162 million or \$4.36 per share in 1976. These results are after a net currency translation loss of \$536,000 in 1977 and \$1.040 million in 1976. The substantial extraordinary gain in 1976 was mainly due to the \$12.476 million profit on sale of the 40% equity interest in Rio Tinto Patiño S.A.

The improvement in income before extraordinary items must be considered highly satisfactory in view of the effect on our Canadian mines of depressed copper and zinc prices, limited economic growth world wide, current aberrations in the world steel industry and the impact of a major fraud on AMC's profits. The strong tin market was a positive factor because of our tin mining and extensive tin smelter interests.

Funds obtained from the sale of long term investments in 1976 are being held on short term deposit awaiting investment in appropriate opportunities as they arise.

During the year, a wholly-owned subsidiary purchased on the open market 23,063 of the company's shares at a cost of \$333,000, bringing the total purchased at 31st December 1977 to 264,618 at an aggregate cost of \$3.531 million.

Canadian Mines

(100% Equity)

The effect of depressed copper prices and increased operating costs at Copper Rand was offset by mining at a higher rate, better gold prices and improved productivity through use of larger ore handling equipment. However, as a result of continued poor prospects for copper prices, it was considered prudent to reduce PMQ's ore reserves by 624,000 tons which became uneconomic and to write-off unamortized development costs of \$2.532 million after tax.

At the Lemoine mine, resolution of start-up problems experienced in 1976 resulted in improved metallurgical performance and lower operating costs.

Overall, the mines operated at a break even level after a currency translation gain of \$606,000 in what has been a most difficult year for Canadian mining.

Companhia Estanífera do Brasil — Cesbra

(92.6% Equity)

Greater throughput at the tin smelter and higher tin prices enabled Cesbra to improve profitability for the third consecutive year. The company's share of the significantly increased profit after tax but before extraordinary items amounted to \$2.222 million compared with \$1.882 million in 1976 and net income, after writing off certain mining and property investments in 1977 as extraordinary items, was \$1.685 million and \$1.944 million, respectively.

As planned, exploration was increased in 1977 and will be further expanded in 1978 with an emphasis on tin properties. While the cost of this activity reduces current profits, it is important for the future profitability of Cesbra that more local sources of tin are developed.

Amalgamated Metal Corporation Limited — AMC

(53.4% Equity)

The AMC Group experienced the same sluggish metal trading markets and depressed steel service centre operations as in 1976. Results were further adversely affected by a major fraud perpetrated by third parties. Once again, the tin smelters made a

record contribution to profit and investment income improved. The company's share of net profit after extraordinary items was \$2.966 million compared with \$1.922 million in 1976. The increase is due to a currency translation gain resulting from the weakness of the U.S. Dollar against Sterling.

In view of the difficulties experienced in 1977, the above result is a satisfactory performance.

Litigation

On 1st March 1978 BRGM announced that it had signed an agreement with a major U.S. mining company to develop the New Caledonia nickel properties held by Cofremmi. A dispute has arisen between the company and BRGM with respect to the effect of this agreement on certain of the company's rights under its 1976 agreement with BRGM, as outlined on page 9.

Patiño Mines (Quebec) Limited, a wholly-owned subsidiary of the company, is one of the defendants in a court action which alleges mercury contamination in Quebec and questions the validity of mining rights granted to the defendants. The company is confident that the action will not succeed.

Canbrusa Mining, N.V.

On 23rd June 1977 Canbrusa acquired 2,493,969 shares or 60.4% of the Company's equity and is the Group's ultimate holding company.

Executive Change

The Patiño Group's mining executive has been strengthened by the appointment of Mr. Ronald E. Ford as Vice-President, Mining. He has had extensive senior management and mining experience with the Noranda Group in Canada.

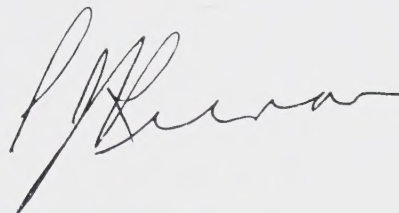
Outlook for 1978

Results to date in 1978 indicate that this will be another difficult year following the pattern of 1977. Severe pressure on domestic profit margins is being

experienced in Brazil by Cesbra, depressed copper and zinc prices are again affecting the results of the Canadian mines, and AMC continues to suffer from lack of trading opportunities and the unsatisfactory state of the steel industry in Canada and the United Kingdom. In these circumstances, renewed efforts are being made to control and reduce costs in all areas and to vigorously pursue and develop new profit opportunities.

It is due to the efforts of Patiño Group employees that we have been able to achieve improved results in these very difficult times. We are grateful to them for their loyalty and dedication and to our shareholders, associates and suppliers for their continued support.

On behalf of the Board of Directors



President and Chief Executive
The Hague, 13th April 1978

patiño mines (quebec) limited — pmq

(100% Equity)

The concentrator treated 667,000 tons of ore in 1977, averaging 1,827 tons per calendar day, and produced concentrates containing 22.487 million pounds of copper, 52,000 ounces of gold and 142,000 ounces of silver. This was a substantial increase over production in 1976 when 569,000 tons of ore were treated and 18.391 million pounds of copper, 39,000 ounces of gold and 117,000 ounces of silver were recovered.

Almost the entire production came from the Copper Rand mine, particularly the Hanging Wall Zone where gold values are higher than average. This area has been developed and is being mined on the bottom operating level at 2,700 feet. A decline is now being driven down from the 2700-foot level, 3,000 feet from the main shaft, and an internal shaft is being constructed from the 2550 to the 3000-foot level adjacent to the decline. These installations will be completed in 1978 giving access to the 2850-foot level, and providing hoisting facilities for the ore. They can be extended for several levels if deeper exploration confirms the extension of the ore zone.

Ore reserves at 31st December 1977 were 5.678 million tons averaging 1.69% copper and 0.057 ounce of gold per ton. In view of the continuing uncertainty regarding the future for copper prices, it was considered prudent to

remove from reserves the tonnage at the Jaculet mine and 489,000 tons of ore at the Copper Rand mine which became uneconomic.

At the Jaculet mine, all recoverable broken ore, materials and equipment were salvaged and in January 1978 the mine was allowed to flood. The Portage mine is being maintained on a standby basis and will be available for production when metal prices improve.

The average price received for copper was Can. 62.9¢ per pound and for gold Can.\$158.00 per ounce. At present metal prices, the revenue from gold production is very important, and every effort is being made to explore and develop ore lenses with higher gold values, and to improve gold recovery.

Increased underground productivity resulting from greater use of larger ore handling equipment, and the consequent reduction in manpower during the year from 396 to 366 partially offset increased costs for labour and materials.

After careful study, it was decided that \$2.532 million after tax of unamortized development expenses should be written off because the recovery of these costs from future revenue is uncertain. The operation showed a substantial loss as a result.

Production Statistics

	1977	1976
Copper (lbs)	22,487,000	18,391,000
Gold (ozs)	52,000	39,000
Silver (ozs)	142,000	117,000
Short tons milled	667,000	569,000
Ore grades:		
Copper (%)	1.740	1.720
Gold (ozs/ton)	0.107	0.092

One of two 2.2 cubic yard electric scoop trams which were a major factor in increased productivity in 1977.



Ore Reserves

	31st December 1977			31st December 1976		
	Short Tons	% Cu	Oz Au	Short Tons	% Cu	Oz Au
Copper Rand to 2,850 feet	3,988,000	1.79	0.060	4,505,000	1.83	0.059
Portage to 2,550 feet	1,579,000	1.43	0.050	1,553,000	1.42	0.050
Jaculet to 1,200 feet	—	—	—	135,000	1.70	0.025
Kerr Addison to 1,170 feet	111,000	1.80	0.025	111,000	1.80	0.025
	5,678,000	1.69	0.057	6,304,000	1.73	0.055

A major portion of the Portage reserves are not economic at present metal prices.

Since commencement of operations in 1960 approximately 13 million tons of ore have been milled.

Lemoine mines limited — lemoine

(100% Equity)

During the year the Lemoine concentrator treated 122,000 tons of ore, an average of 333 tons per day, and produced concentrates containing 10.505 million pounds of copper, 19.147 million pounds of zinc, 14,000 ounces of gold and 267,000 ounces of silver. This production was higher than in 1976 because of better grades of ore treated and improved metallurgical performance, particularly in the recovery of zinc and gold.

Mining of the block of ore between the 620 and 1070-foot levels was almost completed at the year end, and these stopes will be pulled empty and backfilled in 1978. Shrinkage stoping is continuing on the 320, 470 and 620-foot levels.

An exploration drift is being driven to the East and West on the 920-foot level along the strike of the ore lens, and this will be continued in 1978. It is also planned to deepen

the shaft by one level during the coming year in order to mine ore below the 1070-foot level.

Ore reserves at 31st December 1977 remaining above the 1070-foot level were 427,000 tons averaging 4.45% copper, 10.04% zinc, 0.143 ounce of gold and 2.54 ounces of silver per ton. No new ore was added to reserves in 1977 but exploration below the 1070-foot level in 1978 is expected to outline additional ore.

The operation returned a good profit in 1977, but lower metal prices affected the level of profitability in the second half of the year. The average prices received were copper Can. 62.6¢ per pound, zinc Can. 32.4¢ per pound and gold Can. \$163.95 per ounce. Operating costs were improved through a reduction in the work force from 138 to 114 in 1977 following the resolution of many of the start-up problems.



The flotation section of the Lemoine concentrator producing separate zinc and copper concentrates. Performance improved in 1977 due to better operating techniques and additional flotation cells in the copper and zinc circuits.

Production Statistics

	1977	1976
Copper (lbs)	10,505,000	9,274,000
Zinc (lbs)	19,147,000	16,605,000
Gold (ozs)	14,000	12,000
Silver (ozs)	267,000	250,000
Short tons milled	122,000	119,000
Ore grades:		
Copper (%)	4.670	4.350
Zinc (%)	10.640	10.030
Gold (ozs/ton)	0.155	0.151
Silver (ozs/ton)	2.940	2.820

Ore Reserves

	Tons	% Cu	% Zn	Oz Au	Oz Ag
1977	427,000	4.45	10.04	0.143	2.54
1976	582,000	4.59	9.56	0.153	2.80

companhia estanífera do brasil — cesbra

(92.6 % Equity)

Cesbra reported improved results for the third consecutive year. The company's share of profit after tax but before extraordinary items for 1977 was \$2.222 million, representing an 18% increase over the previous year after deducting currency translation losses of \$1.841 million in 1977 (\$836,000 in 1976). After providing for the write-off of certain mining and property investments, as extraordinary items in 1977, net income was \$1.685 million in 1977 compared with \$1.944 million in 1976.

The tin smelter had a 50% increase in throughput over the previous year as 1976 production suffered in the first six months of that year due to the lack of Bolivian cassiterite which was uneconomic to import while subject to a mandatory 100% non-interest bearing 360-day deposit. Export sales accounted for 44% of Cesbra's revenue in 1977. This higher production together with better tin prices improved the profitability of the smelter in 1977. Results were adversely affected by a reduction in the export incentive from 20% to 8% on tin ingots in July 1977 which was extended to tin anodes in January 1978.

Mineração Brasileira S.A. (Mibrasa), 50% owned, (Phibro S.A. — 50%) produced just over 600 tons of tin in concentrates, a slight decrease from 1976 due in part to the lower grade of ore dredged at Candeias and reduced operations at Santa Bárbara. The exploration program was expanded during the year with a significant increase in ore reserves being identified at Santa Bárbara. The program is continuing in 1978 and it is expected that sufficient reserves will be proven to warrant the purchase of a dredge for this property. Higher tin prices in 1977 contributed substantially to Mibrasa's improved profit.

The company owns 50% of Dragagem Fluvial, S.A. (balance held by Mineração Hanna do Brasil Ltda) which in turn has a 50% interest in a joint venture with Mineração Tejuca to dredge for diamonds and gold in the Jequitinhonha River in the State of Minas Gerais. Production commenced on 15th March 1977 but operating difficulties were experienced and areas of low grade gravel were encountered. While the venture's revenue exceeded expenditures in the closing months of the year, Dragagem Fluvial had an overall loss for the year.

As planned, the exploration programme to evaluate the many property leases held by Cesbra and others was expanded in 1977. Negotiations and property examinations are continuing on those with indicated potential. Exploration activity will again be substantially expanded in 1978 with the emphasis being on tin properties.

In 1977, the rate of devaluation of the cruzeiro in relation to the United States dollar fell to 30% from 36% in the prior year while the cost of living increase was reduced to 38.7% from 46%. Due in part to the high price of coffee in the early months of 1977, exports exceeded imports for the year by a small margin. Prior import deposits remain as well as other austerity measures and further success in reducing inflation is expected in 1978. The company's results in 1978 will be adversely affected by government action on export incentives and by the possible imposition of price controls, as well as the costs resulting from the enlarged exploration programme referred to previously.



Tin anodes being loaded for export at Cesbra's warehouse.

amalgamated metal corporation limited — amc

(53.4% Equity)

The company's share of the AMC Group's profit before extraordinary items was \$2.466 million in 1977 compared with \$1.797 million in 1976 and of net profit after extraordinary items, \$2.966 million and \$1.922 million, respectively. These figures include a currency translation gain of \$864,000 in 1977 and a loss of \$354,000 in 1976.

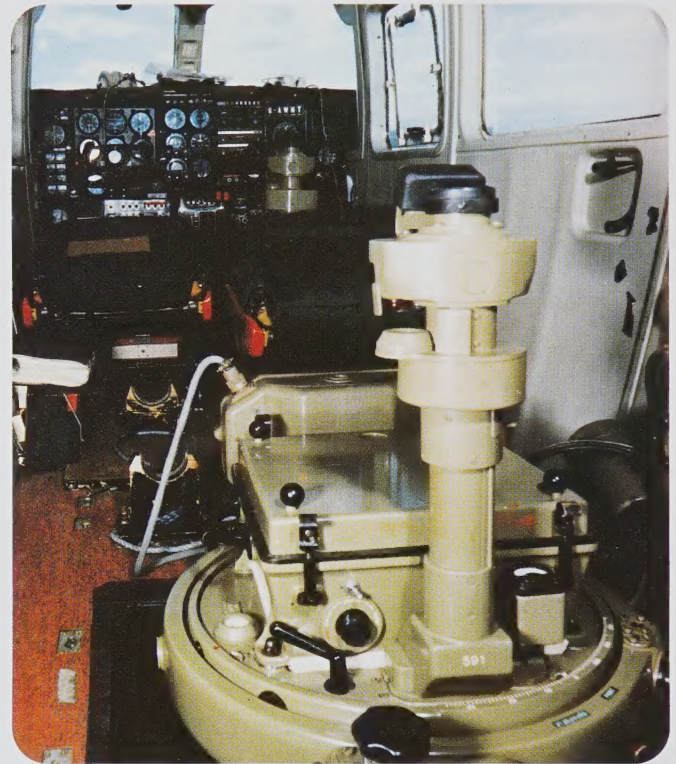
AMC's 1977 results were seriously affected by an exceptional loss of \$3.103 million before tax (\$1.656 million the company's share before tax) which resulted from an elaborate fraud perpetrated on AMC by third parties and concerned shipments of lead and zinc from North Korea. AMC is not optimistic about any material recovery although it is pursuing legal recourse vigorously.

The tin smelters maintained their excellent performance overall and contributed substantially to profits. Datuk Keramat, the Malaysian smelter, surpassed its record results of 1977 due to the higher tin price aided by increased imports of concentrates which partially offset the decline in Malaysian production. Discussions continued during the year regarding increased Malaysian participation in the smelter and AMC maintained its position that any arrangement must be fair to both the majority and minority shareholders. The smelter, which is situated in the centre of Georgetown, Penang, will eventually have to be moved for environmental reasons. This move would free the present smelter site for redevelopment, the freehold of which together with certain other properties in Penang, is owned by Datuk Keramat Properties in which AMC holds 50.5% of the equity. The smelters in Australia and Nigeria both recorded substantial increases in profit. In line with legislation in Nigeria, AMC's equity interest in the Nigerian smelter was reduced by 21% to 58%. In the United Kingdom, Williams Harvey continued to treat its own stockpiled slags and other concentrates and tin-bearing materials.

Very difficult markets in almost every sector affected the performance of the AMC Physical Trading Division which operates internationally as a merchanting and marketing organization for all the major non-ferrous metals and minerals. The one significant exception was the strength of tin which was gratifying in that AMC is probably the Western World's largest independent tin trader, dealing in metal from the five major producing continents. Overheads were reduced in line with the lower activity and the opportunity has been taken to improve the Division's organizational structure with an emphasis on building the product marketing activity so that a suitable mixture of both trading and marketing skills will be available to take advantage of future markets to be served by this world-wide organization.

Mountstar Metal Corporation, which deals in physical metals on a world-wide basis and has scrap operations in the U.K., recorded a lower profit than in 1976 although this was satisfactory and in line with the trade in general.

BKS Surveys Limited — the interior of a Britten — Norman Islander showing one of the cameras used for aerial photography. This aircraft is currently active on aerial survey projects in the U.K.



The AMC Group is represented as a Ring Dealing Member of the London Metal Exchange by Amalgamated Metal Trading, a wholly-owned subsidiary. This company had an excellent performance in 1977 despite difficult markets. AMT aims to obtain as wide a spread of business as possible within the broking field in order to achieve maximum benefit from any improvement in trading conditions.

Results of a number of AMC's industrial interests improved substantially in 1977 but this was partially offset by the unsatisfactory performance of those dependent upon the construction industry in Canada and steel stockholding, particularly in the U.K.

Although weakness in non-ferrous metals prices had an adverse affect on the earnings of Norddeutsche Affinerie, it achieved a satisfactory result. AMC has a 20% interest in this large German copper and lead refinery. As part of AMC's policy of disposing of interests which are outside the main stream of its activities, it sold the 28% interest in Henry Diaper & Co., whose principal business is warehousing in the U.K., and 100% of the equity of Cape Flattery Silica Mines which operates in Queensland, Australia.

Mr. John S. Walton joined the Board and succeeded Mr. Peter A. Neuman as Chief Executive who resigned for personal reasons to return to Canada.

compagnie française d'entreprises minières, métallurgiques et d'investissements s.a. — cofremmi

(10% Equity)

As outlined in last year's Annual Report, an agreement was concluded with Bureau de Recherches Géologiques et Minières (BRGM) on 12th May 1976 whereby the company transferred 90% of Cofremmi's equity to BRGM for —

- (a) a fully paid 10% shareholding in Cofremmi with a share capital of \$110 million,
- (b) a cash payment of \$9 million,
- (c) royalty and profit participation to a minimum amount of \$7.8 million,
and the following options —
- (d) when the financing requirements have been determined, the company may elect not to participate in the project and to the extent that its share of equity called is less than 50 million French francs (\$11 million), the company may convert the deficiency to royalty and profit participation, and
- (e) if a foreign shareholder is invited to acquire an interest in Cofremmi, the company has the right to require that its shareholding and royalty/profit participation be acquired in priority for cash.

With respect to these options, the company accepted to participate in an increase in the share capital of Cofremmi which resulted from the transfer by BRGM of its Ile Art deposit to Cofremmi, in accordance with the agreement dated 29th March 1976, in exchange for 25 million French francs of paid up capital and a 15 million French franc credit to be reimbursed through royalties and profit participation. The share capital was increased from

45 million to 72.8 million French francs which, at the contractually agreed exchange rate, translates to \$10 million and \$16.2 million, respectively. Therefore, to enable the company to retain a 10% equity interest, the company has now subscribed for \$1.62 million of its total entitlement of \$11 million.

Ore reserves are:

		Dry metric tons	
Tiebaghi	Garnierite ore	13,300,000	2.90 % Ni
	Laterite ore	12,600,000	1.20 % Ni + Co.
Poum	Garnierite ore	35,000,000	2.15 % Ni
	Laterite ore	41,000,000	1.34 % Ni + Co.
Ile Art	Garnierite ore	11,000,000	2.80 % Ni + Co.

BRGM and a major U.S. mining company announced on 1st March 1978 that they had signed an agreement to develop the New Caledonia nickel properties held by Cofremmi. Under the terms of this agreement a new holding company will be formed to which BRGM will transfer its 90% interest in Cofremmi and in which BRGM will hold 51% of the equity and the major U.S. mining company 49% of the equity. In the opinion of the company's counsel, this agreement, if implemented, allows the company to exercise the option referred to in (e) above. BRGM have formally advised the company that they do not agree with this interpretation. Acting on the advice of its counsel, the company has elected to submit the dispute to arbitration under the Rules of the International Chamber of Commerce in order to insure that its rights are protected.



Sample preparation plant at the Tiebaghi deposit

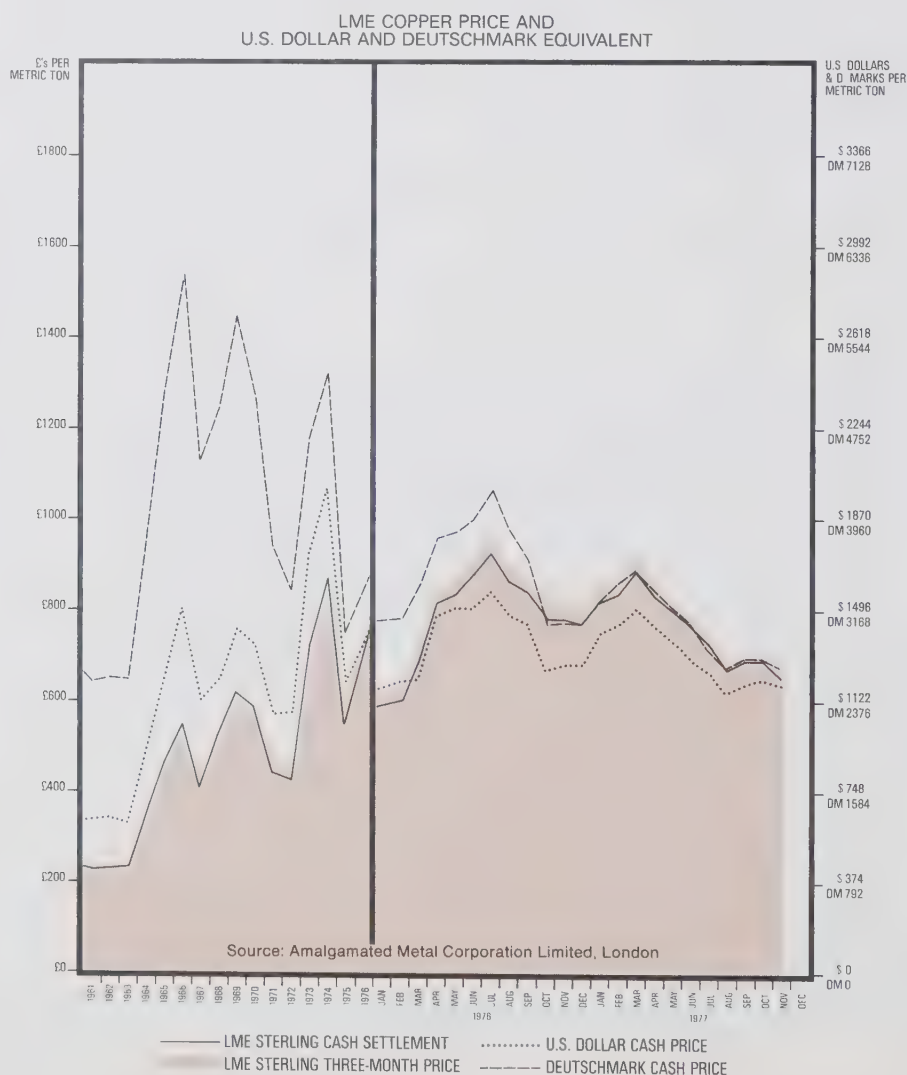
Copper

Compared to 1976, refined copper consumption in the Western World increased by 5% to 6.75 million tons in 1977 with increases of 6½% in the United States and 9½% in Japan compared to minimal growth in Western Europe. Production increased by approximately 340,000 tons to 7.0 million tons, which, coupled with net imports from the Eastern bloc, resulted in an apparent production surplus of some 300,000 tons during the year. Production is forecast to rise by 215,000 tons to 7.2 million tons in 1978 while consumption is projected to increase by 4% to 7.0 million tons. After allowing for net imports from the Eastern bloc, the surplus should approximate 1977 levels. The geographic spread of the increase in consumption should follow the same pattern as in 1977.

Mine production in the Western World increased by about 100,000 tons to over 6.3 million tons in the year, with increases in Peru, Zaire and Canada offsetting reductions in the U.S.A. and Zambia. The sharp fall in the price of copper since May resulted in a number of mine closures and in others operating at reduced production levels,

principally in the United States and Canada. Some mines in CIPEC countries are producing a net foreign exchange drain. The net increase in mine capacity in 1978 should be 130,000 tons, being 450,000 tons of new capacity mainly from Peru, Mexico, Philippines and Yugoslavia less reduction in capacity due to mine closures. Mine production is forecast to increase by 190,000 tons to 6.5 million tons in 1978.

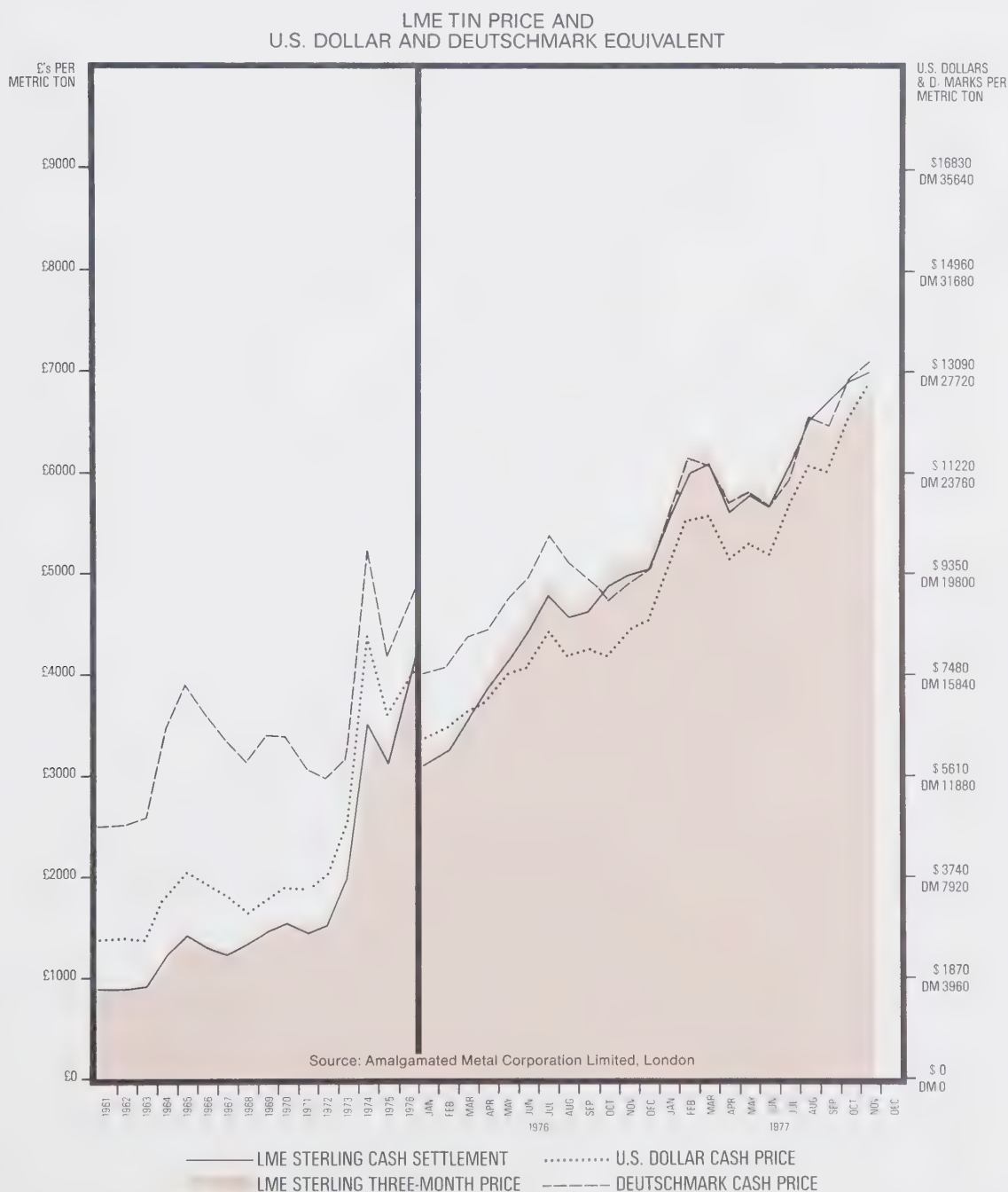
1978 is likely to be marked by more announcements of mine closures, weak demand for refined copper and increasing pressure on the United States Government to provide assistance to the domestic mining industry. Proposed legislation in the United States calling for the GSA to sell up to 45,000 tons of tin along with other metals to provide funds for the purchase of 225,000 tons of copper is receiving broad support but developments are not expected for sometime. This and recent measures agreed between Zaire, Zambia and Peru to reduce production should put upward pressure on the price of copper but a significant increase is unlikely in the absence of further major closures or a more significant increase in demand than that currently projected.



Tin

Western World production of both tin-in-concentrates and smelter tin rose to an estimated 184,500 tons (nearly 4% over 1976) and 181,000 tons (less than 1% over 1976), respectively. Tin metal consumption increased 2½% to 197,000 tons, due primarily to a 7.1% increase in tinplate production in the first half of the year and growth in the tin solder market. During 1977 consumers tended to purchase in excess of their forecast requirements resulting in modest inventory accumulations by them. At the same time metal producer stocks had declined to less than 25,000 tons.

For 1978 the single most important factor in the tin market will be the possible sale by the United States Government of up to 45,000 tons of tin from the GSA stockpile. Current forecasts indicate a shortfall of some 9,500 tons in 1978 and without significant releases by the GSA a serious shortage could occur. Producer stocks could be reduced but this is unlikely unless there is a material increase in the price of tin. If this occurs, substitutions would increase and it is likely that the governments of the tin producing countries will act to encourage some stock releases by the GSA. Against this background some fall in tin prices should be expected in 1978.

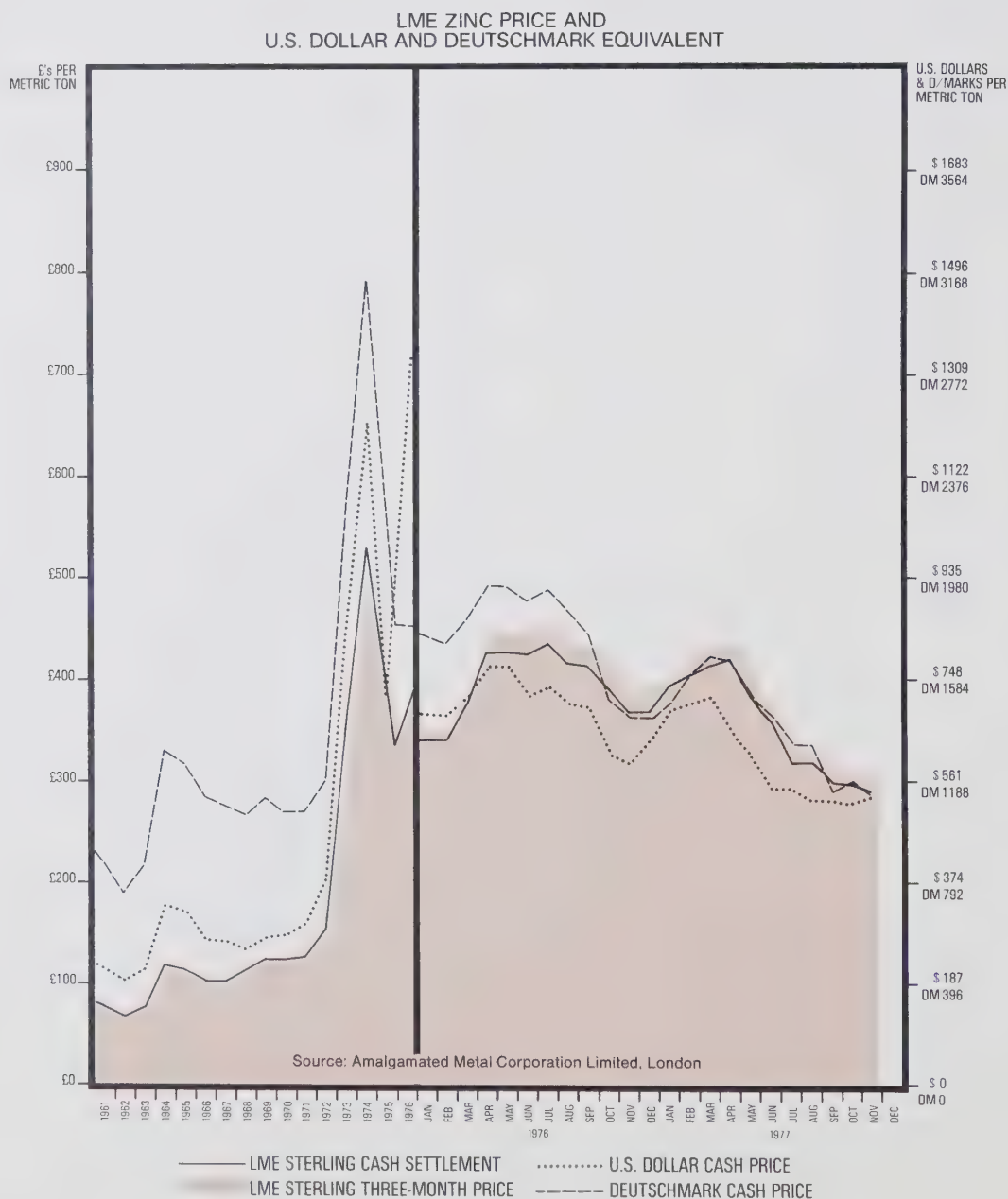


Zinc

Zinc concentrate production in 1977 increased to approximately 4.4 million tons of recoverable metal, a 7% increase over 1976, and slab production is forecast to have increased by less than 1% to 4.2 million tons. Concentrate production would have been greater but for start-up and labour problems at the Tara mine in Ireland. While production increased, consumption of slab zinc declined about 1¼% to 4.1 million tons, reflecting the continuing weakness in industrial construction and reductions in diecasting alloy usage in the automotive industry.

Production of recoverable metal in concentrate is

forecast to increase by nearly 200,000 tons in 1978 with little prospect of appreciable increase in consumption. Indeed it is likely that there will be a further decline in slab zinc consumption in 1978. At present nearly all zinc smelters are operating at critically low levels of capacity utilization and any further reduction would cause inevitable closures. The situation is being aggravated by additional capacity coming onstream in some European countries. During 1977 zinc concentrate inventories materially increased and this trend is expected to accelerate in 1978. The higher inventories should result in some mine closures and reduced capacity utilization which are necessary if some balance between production and consumption is to be achieved. It is anticipated that zinc prices will remain weak in 1978.



Balance Sheet

(expressed in thousands of United States dollars)

	31st December 1977	31st December 1976
Assets		
Current Assets		
Cash	\$ 20	\$ 54
Marketable securities	1,224	1,251
Accounts receivable	530	50
	<u>1,774</u>	<u>1,355</u>
Investments and Advances		
Subsidiaries	107,927	102,880
Other securities	—	49
	<u>107,927</u>	<u>102,929</u>
	<u>\$ 109,701</u>	<u>\$ 104,284</u>
Liabilities		
Current Liabilities		
Accounts payable and accruals	\$ 406	\$ 305
Taxes payable	299	427
	<u>705</u>	<u>732</u>
Shareholders' Equity		
Share Capital		
Authorized 16,000,000 shares, par value		
Dfl. 5 per share Dfl. 80,000,000		
Issued and fully paid: 4,376,000 shares	6,229	6,229
Premium on shares issued	30,544	30,544
Retained earnings	75,754	69,977
	<u>112,527</u>	<u>106,750</u>
Less: 264,618 company shares purchased, at cost (241,555 shares in 1976)	3,531	3,198
	<u>108,996</u>	<u>103,552</u>
	<u>\$ 109,701</u>	<u>\$ 104,284</u>

Statement of Income

(expressed in thousands of United States dollars)

Net income for the year	\$ 5,777	\$ 18,162
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patíño, n.v. and subsidiaries

Consolidated Balance Sheet

(expressed in thousands of United States dollars)

Assets	31st December 1977	31st December 1976
Current Assets		
Cash, short term investments	\$ 55,448	\$ 62,360
Marketable securities	1,381	1,541
Accounts receivable	100,457	78,743
Inventories	85,819	84,616
Taxes recoverable	1,293	1,006
	<u>244,398</u>	<u>228,266</u>
Investments and Advances		
Associated companies	3,742	4,635
Other securities	16,435	17,014
	<u>20,177</u>	<u>21,649</u>
Fixed Assets	55,288	55,503
Less: Accumulated depreciation	27,593	25,256
	<u>27,695</u>	<u>30,247</u>
Other Assets		
Mine development and mining property costs	36,744	36,055
Less: Amortization	27,617	22,333
	<u>9,127</u>	<u>13,722</u>
Long term receivables	7,800	7,800
	<u>16,927</u>	<u>21,522</u>
	<u>\$ 309,197</u>	<u>\$ 301,684</u>

Liabilities	31st December 1977	31st December 1976
Current Liabilities		
Bank advances	\$ 48,619	\$ 49,812
Accounts payable and accruals	85,737	83,306
Taxes payable	11,071	8,732
Current portion of long term debt	2,099	3,739
	<u>147,526</u>	<u>145,589</u>
Long Term Debt	2,810	6,107
Deferred Taxes	6,970	7,471
Minority Interests	42,895	38,965
	<u>200,201</u>	<u>198,132</u>
Shareholders' Equity		
Share Capital		
Authorized 16,000,000 shares, par value		
Dfl. 5 per share Dfl. 80,000,000		
Issued and fully paid: 4,376,000 shares	6,229	6,229
Premium on shares issued	30,544	30,544
Retained earnings	75,754	69,977
	<u>112,527</u>	<u>106,750</u>
Less: 264,618 company shares purchased, at cost (241,555 shares in 1976)	3,531	3,198
	<u>108,996</u>	<u>103,552</u>
	<u>\$ 309,197</u>	<u>\$ 301,684</u>

patiño, n.v. and subsidiaries

Consolidated Statement of Income

(expressed in thousands of United States dollars)

	Year ended 31st December 1977	Year ended 31st December 1976
Revenue		
Net sales	\$ 1,922,383	\$ 1,917,030
Equity income	1,494	1,008
Other income	7,095	6,761
	<u>1,930,972</u>	<u>1,924,799</u>
Costs and Expenses		
Operating costs	1,895,464	1,891,267
Amortization and depreciation	9,697	5,101
Interest expense — long term	1,043	1,212
— short term	7,638	9,594
Currency translation adjustments	(1,029)	1,591
	<u>1,912,813</u>	<u>1,908,765</u>
Income before taxes, minority interests and extraordinary items	<u>18,159</u>	<u>16,034</u>
Taxes — current	7,515	4,550
— deferred	(1,043)	2,016
	<u>6,472</u>	<u>6,566</u>
Income before minority interests and extraordinary items	<u>11,687</u>	<u>9,468</u>
Minority interests — currency translation adjustments	1,565	(551)
— other	4,259	4,520
	<u>5,824</u>	<u>3,969</u>
Income before extraordinary items	<u>5,863</u>	<u>5,499</u>
Extraordinary items	(86)	12,663
Net income	<u>\$ 5,777</u>	<u>\$ 18,162</u>
Earnings per share		
Before extraordinary items	\$ 1.42	\$ 1.32
After extraordinary items	\$ 1.40	\$ 4.36

Consolidated Statement of Retained Earnings

(expressed in thousands of United States dollars)

Balance, beginning of year	\$ 69,977	\$ 53,679
Goodwill adjustments	—	228
Net income	5,777	18,162
Dividends paid	—	(2,092)
Balance, end of year	<u>\$ 75,754</u>	<u>\$ 69,977</u>

patino, n.v. and subsidiaries

Consolidated Statement of Changes in Financial Position

(expressed in thousands of United States dollars)

	Year ended 31st December 1977	Year ended 31st December 1976
Financial resources were provided by:		
Income before minority interests and extraordinary items	\$ 11,687	\$ 9,468
Amortization and depreciation	9,697	5,101
Deferred taxes	(1,043)	2,016
Equity income	(1,494)	(1,008)
	<u>18,847</u>	<u>15,577</u>
Proceeds from disposals of investments	3,409	39,345
Proceeds from disposals of fixed assets and mining properties	2,592	520
Increase in long term debt	—	1,642
Other items	2,254	2,285
	<u>27,102</u>	<u>59,369</u>
Financial resources were used for:		
Fixed asset additions	4,444	3,912
Mine development and mining property costs	1,362	2,747
Acquisition of investments and subsidiaries	129	1,212
Long term debt repayment	3,297	10,269
Minority interests	3,342	3,173
Dividends paid	—	2,092
Purchase of company's shares	333	1,340
Provision for loss on disposal of subsidiaries	—	1,848
	<u>12,907</u>	<u>26,593</u>
Increase in working capital	14,195	32,776
Working capital, beginning of year	82,677	49,901
Working capital, end of year	\$ 96,872	\$ 82,677

patño, n.v. and subsidiaries

Analysis of Changes in Working Capital (expressed in thousands of United States dollars)

	Year ended 31st December 1977	Year ended 31st December 1976
Increase (decrease) in current assets		
Cash, short term investments	\$ (6,912)	\$ 40,289
Marketable securities	(160)	1,181
Accounts receivable	21,714	(15,793)
Inventories	1,203	9,945
Taxes recoverable	287	64
	<u>16,132</u>	<u>35,686</u>
Increase (decrease) in current liabilities		
Bank advances	(1,193)	917
Accounts payable and accruals	2,431	4,749
Taxes payable	2,339	(4,319)
Current portion of long term debt	(1,640)	1,563
	<u>1,937</u>	<u>2,910</u>
Increase in working capital	<u>\$ 14,195</u>	<u>\$ 32,776</u>

Signed for approval of:

Balance Sheet
Statement of Income
Consolidated Balance Sheet
Consolidated Statement of Income
Consolidated Statement of Retained Earnings
Consolidated Statement of Changes in Financial Position
Analysis of Changes in Working Capital
Notes to Corporate and Consolidated Financial Statements

D. Azéma
M. P. Bloemsma
W. G. Brissenden
P. M. Haas
P. J. Keenan
F. Y. McCutcheon
S. P. Ogryzlo
G. Ortiz P.
J. Ortiz-Patiño
A. Patiño R.

Notes to Corporate and Consolidated Financial Statements

1. Accounting policies

The principal accounting policies followed by Patiño, N.V. are:

Basis of consolidation

The financial statements are prepared in accordance with generally accepted accounting principles in The Netherlands and include consolidated financial statements of the company and its subsidiaries. The consolidated statements of income and of changes in financial position include the results of subsidiaries acquired during the year from the date of purchase and include the results of subsidiaries sold during the year until the date of sale.

Currency translation

The financial statements are expressed in United States dollars. Current assets and current liabilities in currencies other than United States dollars are translated at year end rates of exchange. Other assets and liabilities not in United States dollars are translated at historic rates of exchange.

Transactions in currencies other than United States dollars are translated into United States dollars using rates of exchange prevailing during each period, except for amortization and depreciation which are translated at historic rates. Currency translation adjustments are shown separately in the statement of income.

Valuation of marketable securities and inventories

Marketable securities are carried at the lower of cost or market value.

Inventories are generally stated at the lower of cost or net realizable value. However, certain metals are carried at market value or forward selling prices and supplies are carried at recent purchase cost.

Investments and advances

Associated companies, being more than 20% owned investments, are reported on the equity basis and the company's share of the income of associated companies is shown in the consolidated statement of income as equity income.

Quoted securities are stated at the lower of cost or market value. Unquoted securities are stated at cost, less amounts written off. Income from investments is recorded when received.

Fixed assets

Fixed assets are stated at cost with depreciation being provided on the straight line method at rates calculated to write off the assets over their estimated remaining useful lives.

Mine development and mining property costs

Amortization of mine development and mining property costs for operating properties is provided on the basis of the relationship between metals sold and ore reserves and is calculated to fully offset these costs at the end of the estimated economic lives of the properties. Unamortized costs applicable to individual mines are written off if the recovery of such costs from future revenue appears uncertain.

Exploration expenditures are written off unless they relate to projects where production is probable.

Upon the sale or retirement of properties, the accounts are relieved of the cost and the related accumulated amortization and depreciation and any resulting profit or loss is included in income.

Goodwill adjustments

The difference between the cost of investments in subsidiary and associated companies and the company's share of the underlying net assets at the time of acquisition is transferred to consolidated retained earnings.

Taxation

The company follows the tax allocation basis of accounting with respect to all timing differences between reported income before taxes and taxable income.

Provision is made for dividend withholding taxes arising on anticipated dividend distributions out of the company's share of the undistributed earnings of subsidiary and associated companies.

Earnings per share

The calculation of earnings per share is based on the weighted average number of shares outstanding (excluding shares held by a wholly-owned subsidiary company) during the year. The earnings per share would not be materially diluted if all the outstanding options were to be exercised.

2. Cash, short term investments

During the year a wholly-owned subsidiary placed US \$20,000,000 on deposit maturing 29th December 1978 at an interest rate fixed to 30th June 1980. At maturity the company may extend the deposit to 30th December 1979 and at that date further extend it to 30th June 1980. Should the company elect not to extend the deposit at either maturity date or elect to terminate the deposit at any other time, profits or losses which result from the acquisition of this deposit by the bank will be for the account of the company.

3. Marketable securities

	31st December	
	1977	1976
	(thousands)	
Cost	\$ 1,381	\$ 1,541
Market value	\$ 1,692	\$ 2,669

4. Inventories

	31st December	
	1977	1976
	(thousands)	
Metals, finished and in process	\$ 68,978	\$ 60,607
Steel, chemicals and other products	15,055	21,929
Supplies	1,786	2,080
	\$ 85,819	\$ 84,616

5. Other securities

	31st December	
	1977	1976
	(thousands)	
Unquoted securities	\$ 9,026	\$ 9,249
Quoted securities	7,409	7,765
	<u>\$ 16,435</u>	<u>\$ 17,014</u>

The market value of the quoted securities at 31st December was \$12,468,000 (1976 — \$7,852,000).

6. Assets pledged to secure borrowings

Bank advances amounting to \$11,297,000 (1976 — \$19,872,000) of certain subsidiaries are secured by assets of these subsidiaries.

7. Fixed assets

	Land and Buildings		Plant, Machinery and Equipment	Mine Buildings and Equipment	Total
	Freehold	Leasehold			
Cost					
At 1st January 1977	\$ 13,538	\$ 2,470	\$ 18,695	\$ 20,800	\$ 55,503
Disposals	(909)	(471)	(3,279)	—	(4,659)
Additions	1,298	59	2,615	472	4,444
At 31st December 1977	<u>\$ 13,927</u>	<u>\$ 2,058</u>	<u>\$ 18,031</u>	<u>\$ 21,272</u>	<u>\$ 55,288</u>
Depreciation					
At 1st January 1977	\$ 1,657	\$ 484	\$ 10,869	\$ 12,246	\$ 25,256
Disposals	(59)	(256)	(1,752)	—	(2,067)
Charge for the year	338	155	2,169	1,742	4,404
At 31st December 1977	<u>\$ 1,936</u>	<u>\$ 383</u>	<u>\$ 11,286</u>	<u>\$ 13,988</u>	<u>\$ 27,593</u>

8. Long term debt

	31st December	
	1977	1976
	(thousands)	
Long term debt represents:		
(a) 7½% serial debentures issued by Patiño Mines (Quebec) Limited, the last instalment being repayable in 1979. The debentures are secured by a first floating charge on the company's assets and are guaranteed by the company.	\$ 1,911	\$ 3,685
(b) Secured bank loans made to AMC group companies	899	1,701
(c) Unsecured long term loans	—	721
	<u>\$ 2,810</u>	<u>\$ 6,107</u>

10. Contingent liabilities

Officials of Revenue Canada have questioned the company's tax treatment of losses on commodity futures transactions in 1973 and 1974 and re-assessment notices for these two years were received in 1977. The potential liability for federal and provincial income taxes together with accrued interest with regard to this matter approximates Can.\$1.3 million. The company's professional advisors reaffirmed that the company has good arguments to support its case, and notices of objection for these re-assessments were filed with Revenue Canada in 1977. No provision has been made in the accounts for any possible income tax.

The Cree Indians initiated, in 1976, court action against the majority of the resource companies in North-Western Quebec for alleged mercury contamination. As part of this action, damages of Can.\$1,540,000 were claimed against the company, jointly and severally with other companies in the area. In the same action, the Cree Indians questioned the validity of the mining rights granted to the companies by the Province of Quebec. The company's legal counsel has reviewed all the evidence available to date and has prepared for the defence of this case. They believe that the company has a valid substantive defence and are confident that the actions will not succeed.

9. Shareholders' equity

Options to purchase 29,000 shares at Can.\$25.00 per share are exercisable up to 31st December 1978.

11. Net sales

	1977	1976
	(thousands)	
Merchanting in metals and ores	\$ 1,394,278	\$ 1,442,711
Tin smelting	393,224	356,566
Steel merchanting and fabricating	47,506	49,392
Sales of mineral production	34,590	25,045
Other activities	52,785	43,316
	<u>\$ 1,922,383</u>	<u>\$ 1,917,030</u>

12. Other income

	1977	1976
	(thousands)	
Interest income	\$ 4,863	\$ 4,922
Income from other securities	2,232	1,839
	<u>\$ 7,095</u>	<u>\$ 6,761</u>

13. Amortization and depreciation

	1977	1976
	(thousands)	
Amortization of mine development and mining property costs	\$ 5,293	\$ 1,141
Depreciation	4,404	3,960
	<u>\$ 9,697</u>	<u>\$ 5,101</u>

Following careful study, it was considered prudent to write off \$3,492,000 (after taxes \$2,532,000) of unamortized mine development expenses relating to the Bateman Bay, Copper Cliff, Jaculet and Portage properties, as the recovery of such costs from future revenue appears uncertain in view of changed economic conditions.

14. Remuneration of Directors and senior officers of Patiño, N.V.

There were eleven Directors who received in 1977 total direct remuneration of \$289,000. Directors and senior officers of the company as defined by the Ontario Securities Act, received in 1977 total direct remuneration of \$361,000.

15. Extraordinary items

	1977	1976
	(thousands)	
Gains on disposals of investments and subsidiaries	\$ 312	\$ 13,815
Write down of carrying value of investments	(398)	(1,256)
Utilization of tax losses brought forward	—	104
	<u>\$ (86)</u>	<u>\$ 12,663</u>

Amounts are reported net of applicable taxation and minority interests.

16. Goodwill adjustments

	1977	1976
	(thousands)	
AMC group	\$ —	\$ 111
Cesbra group	—	117
	<u>\$ —</u>	<u>\$ 228</u>

17. Appropriation of profit

In accordance with Article 15 of the company's statutes, the Directors did not declare an interim dividend for the year ended 31st December 1977 and do not propose any dividend.

Auditors' Report

We have examined the financial statements set out on pages 13 to 21 inclusive of Patiño, N.V. The financial statements of certain subsidiaries were examined by other auditors whose reports thereon were furnished to us. Based on our examination and the work of other auditors, we are of the opinion that the accompanying financial statements present fairly the amount and composition of the equity of the company at 31st December 1977 and of the results and changes in financial position for the year then ended.

The Hague
13th April 1978

Price Waterhouse & Co.*

* Signatory authorized under The Netherlands Civil Code, Book 2.

five year consolidated summary

(expressed in thousands of United States dollars)

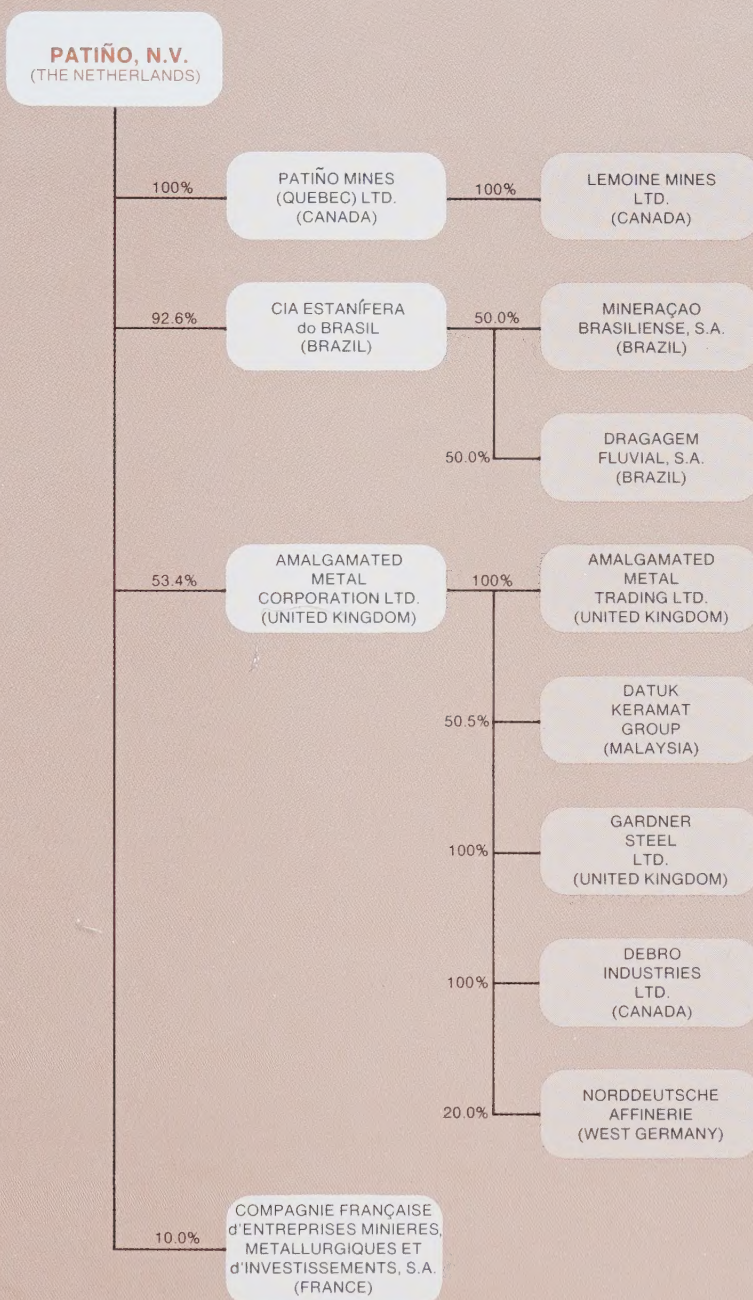
For the year	1977	1976	1975 restated	1974 restated	1973 restated
Revenue					
Merchanting in metals and ores	\$1,394,278	\$1,442,711	\$1,263,037	\$1,300,983	\$ 713,790
Tin smelting	393,869	356,886	308,739	350,002	155,028
Steel merchanting and fabricating	47,506	49,392	41,726	67,049	46,200
Sales of mineral production	35,584	25,910	12,595	37,239	27,109
Other activities	59,735	49,900	51,106	65,062	20,699
Total	<u>\$1,930,972</u>	<u>\$1,924,799</u>	<u>\$1,677,203</u>	<u>\$1,820,335</u>	<u>\$ 962,826</u>
Income before taxes, minority interests and extraordinary items					
Merchanting in metals and ores	\$ (1,747)	\$ 3,113	\$ 2,205	\$ 13,405	\$ 2,789
Tin smelting	15,862	8,587	6,193	6,765	4,088
Steel merchanting and fabricating	(2,813)	(261)	(427)	4,460	3,526
Sales of mineral production	1,469	1,165	492	16,429	9,438
Other activities	5,388	3,430	(128)	3,407	2,475
	<u>18,159</u>	<u>16,034</u>	<u>8,335</u>	<u>44,466</u>	<u>22,316</u>
Taxes	6,472	6,566	4,773	17,721	8,088
Minority interests	5,824	3,969	2,928	9,307	4,519
Income before extraordinary items	<u>5,863</u>	<u>5,499</u>	<u>634</u>	<u>17,438</u>	<u>9,709</u>
Extraordinary items	(86)	12,663	3,520	927	869
Net income	<u>\$ 5,777</u>	<u>\$ 18,162</u>	<u>\$ 4,154</u>	<u>\$ 18,365</u>	<u>\$ 10,578</u>
* <i>per share</i>	<u>1.40</u>	<u>4.36</u>	<u>0.96</u>	<u>4.20</u>	<u>2.42</u>
Dividends paid	<u>—</u>	<u>2,092</u>	<u>2,773</u>	<u>1,767</u>	<u>—</u>
<i>per share</i>	<u>—</u>	<u>0.50</u>	<u>0.65</u>	<u>0.40</u>	<u>—</u>
At the year end					
Working capital	\$ 96,872	\$ 82,677	\$ 49,901	\$ 47,585	\$ 36,731
Investments	20,177	21,649	45,222	40,003	42,966
Fixed assets, net	27,695	30,247	32,047	28,786	21,362
Other assets	16,927	21,522	19,878	30,771	27,361
Long term debt	2,810	6,107	14,734	14,719	11,363
Deferred taxes	6,970	7,471	5,125	5,185	4,240
Minority interests	42,895	38,965	38,595	40,488	37,116
Shareholders' equity at book value	<u>\$ 108,996</u>	<u>\$ 103,552</u>	<u>\$ 88,594</u>	<u>\$ 86,753</u>	<u>\$ 75,701</u>
** <i>per share</i>	<u>26.51</u>	<u>25.05</u>	<u>20.96</u>	<u>19.82</u>	<u>17.30</u>
Shares issued at end of year	<u>4,376,000</u>	<u>4,376,000</u>	<u>4,376,000</u>	<u>4,376,000</u>	<u>4,376,000</u>
Shares acquired of own issue	<u>264,618</u>	<u>241,555</u>	<u>149,400</u>	<u>—</u>	<u>—</u>

* Based on 4,120,493 shares (1976 — 4,167,486 shares) being the weighted average number of shares outstanding (excluding shares held by a wholly-owned subsidiary company) during the year.

** Based on 4,111,382 shares (1976 — 4,134,445 shares) being the number of shares outstanding (excluding shares held by a wholly-owned subsidiary company) at the end of the year.

The above summary does not include any increases in the value of the group's ore reserves, development projects or holdings in land and buildings.

group structure



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Patiño Mines (Quebec) Ltd./Lemoine Mines Ltd.

Directors and Officers

Stephen P. Ogryzlo, *Chairman of the Board, Director*
Harold E. Rudd, *President and Chief Executive, Director*
William G. Brissenden, *Director*
L. Yves Fortier, Q.C., *Director*
Patrick J. Keenan, C.A., *Director*
Jaime Ortiz-Patiño, *Director*
Sidney H. Robinson, Q.C., *Director*

Colin M. Marshall, *Vice-President, Mining*
John H. Iglesias, *General Manager*
Donald H. Mather, *Secretary-Treasurer*

Companhia Estanífera do Brasil S.A.

Directors and Officers

Raymond R. Jackson, C.A., *President, Director*
Fausto M. Basto, *Finance Director*
Samuel A. Hanan, *Technical Director*
Carlos E. Lins, *Director*

Amalgamated Metal Corporation Ltd.

Directors and Officers

Antenor Patiño R., *Honorary President, Director*
Sir John Saunders, C.B.E., D.S.O., *Chairman, Director*
Jaime Ortiz-Patiño, *Deputy Chairman, Director*
John S. Walton, *Chief Executive, Director*
Allan A. Curran, *Director*
Michael F. Garner, F.C.A., *Finance Director*
Walter A. Gleich, *Director*
Paul Hofmeister, *Director*
Patrick J. Keenan, C.A., *Director*
David R. Mitchell, *Director*
George Ortiz P., *Director*
Alexander D. Stirling, C.A., *Director*
Anthony M. R. Sylvester, *Director*

Peter J. Norton, F.C.I.S., *Secretary*
Robert H. H. Newman, *Treasurer*

**Compagnie Francaise d'Entreprises Minières,
Métallurgiques et d'Investissements S.A.**

Directors and Officers

René Michel, *President and Chief Executive, Director*
Pierre Boisson, *Director*
Paul Bourrelier, *Director*
Patrick J. Keenan, C.A., *Director*
Francis Langlois, *Director*
Jean Lespine, *Director*
Yves Perrin, *Director*
Georges Perrineau, *Director*

